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PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	10/780,172
Filing Date	February 16, 2004
First Named Inventor	David H. Stark
Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket Number	STRK-26,621

Total Number of Pages in This Submission

### ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Post card; 13 non-patent literature documents.
<div>Remarks</div>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	HOWISON & ARNOTT, L.L.P. John J. Arnott, Reg. No. 39,095
Signature	<i>John J. Arnott</i>
Date	6/17/04

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	John J. Arnott, Reg. No. 39,095		
Signature	<i>John J. Arnott</i>	Date	6/17/04

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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K-26,621

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: David H. Stark  
Serial No.: 10/780,172  
Filed: February 16, 2004  
Group: To Be Assigned  
Examiner: To Be Assigned  
For: HERMETICALLY SEALED MICRO-DEVICE PACKAGE USING COLD-GAS DYNAMIC SPRAY MATERIAL DEPOSITION

Mail Stop DD  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on:	
<u>JUNE 17, 2004</u>	(Date of Deposit)
<u>JOHN J. ARNOTT (39,095)</u>	(Name of Person Mailing Document)
<u><i>John J. Arnett</i></u>	(Signature)
<u>6/17/04</u>	(Date of Signature)

**INFORMATION DISCLOSURE STATEMENT**

In accordance with the requirements of 37 C.F.R. §§ 1.56, 1.97, and 1.98, attached please find a Form PTO SB/08 listing information for consideration by the Office in connection with its examination of the above-captioned patent application. Copies of the listed U. S. patent references are not enclosed pursuant to revised Office guidelines. A copy of each of the listed non-patent documents is enclosed herewith.

Applicant requests that this information disclosure statement be considered and that a copy of the Form PTO SB/08 be returned to the undersigned indicating the consideration of each document listed.

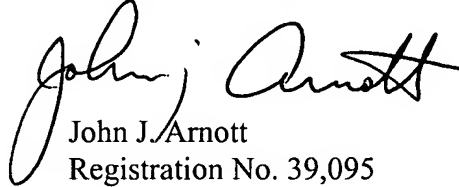
Applicant submits that no representation is made, and no representation is intended, that more relevant material does not exist, or that the order of presentation of these materials in any way

reflects their relevant pertinence. The listing on the attached Form PTO SB/08 is not intended to constitute an admission of any kind. Specifically, this presentation is not an admission that any of the items listed are properly citable against the above-identified application as prior art. Applicant respectfully submits that his invention is patentable over the enclosed documents listed on Form PTO SB/08.

To Applicant's knowledge, this information disclosure statement is being filed before the mailing date of a first Office Action on the merits. Therefore, pursuant to 37 C.F.R. §1.97(b)(3), no fee is believed necessary for its consideration. Please charge any necessary fees or deficiencies in fees necessary for the filing of this paper or credit any overpayment to Deposit Account No. 20-0780/STRK-26,621 of HOWISON & ARNOTT, L.L.P.

Respectfully submitted,

HOWISON & ARNOTT, L.L.P.  
Attorneys for Applicant



John J. Arnott  
Registration No. 39,095

JJA/yoc  
P.O. Box 741715  
Dallas, Texas 75374-1715  
Tel. (972) 479-0462  
Fax. (972) 479-0464  
December 9, 2003



PTO/SB/08A (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10,780,172
Filing Date	February 16, 2004
First Named Inventor	David H. Stark
Art Unit	To Be Assigned
Examiner Name	To Be Assigned
Attorney Docket Number	STRK-26,621

Sheet 1 of 3

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	01	US- 3,698,878	10/17/72	Hale et al.	
	02	US- 5,118,924	06/02/92	Mehra et al.	
	03	US- 5,302,414	04/12/94	Alkhimov et al.	
	04	US- 5,423,119	06/13/95	Yang	
	05	US- 6,139,913	10/31/00	Van Steenkiste et al	
	06	US- 6,191,359	02/20/01	Sengupta et al.	
	07	US- 6,627,814	09/30/03	Stark	
	08	US- 6,537,121	03/25/03	Baret	
	09	US- 6,548,895	04/15/03	Benavides et al.	
	10	US- 4,355,323	10/19/82	Hendrikus Kock	
	11	US- 5,945,721	08/31/99	Nobuyoshi Tatoh	
	12	US- 5,949,655	09/07/99	Thomas Glenn	
	13	US- 6,020,628	02/01/00	Brian Mravic et al.	
	14	US- 5,625,222	04/1997	Yoneda et al.	
	15	US-			
	16	US-			
	17	US-			
	18	US-			
	19	US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

Examiner  
SignatureDate  
Considered

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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/780,172
		Filing Date	February 16, 2004
		First Named Inventor	David H. Stark
		Art Unit	To Be Assigned
		Examiner Name	To Be Assigned
Sheet 2	of 3	Attorney Docket Number	STRK-26,621

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	200	DORON TEOMIM, AVNER BADIHI, GIL ZILBER; "An innovative approach to wafer-level MEMS packaging"; Solid State Technology (Magazine); January 2002; Penwell (Publ.); Nashua, NH USA.	
	201	Carpenter Specialty Alloys: Controlled-Expansion Alloys (Catalog/Brochure); December 1999; Pages 1-24 (esp. 5-8); Carpenter Technology Corporation (Publ.); Wyomissing, PA USA.	
	202	JPL Technology Reporting Office; "Hermetic Wafer Bonding By Use of Microwave Heating"; NASA Tech Brief, Vol. 25, No. 5, from JPL New Technology Report NPO-20608 (NASA Contract No. NAS-7-918); May 1, 2001; Jet Propulsion Laboratory, California Institute of Technology (Publ.); Pasadena, CA, USA; including therein:	
		NTR Inventors Report by HENRY W JACKSON, JOHN D MAI, MARTIN B BARMATZ, NASSER K BUDRAA, WILLIAM T PIKE; NASA Case No. 0205 20608; March 1997(?) (Best Available Copy); including therein: (same authors) "Low Pressure and Low Temperature Hermetic Wafer Bonding Using Microwave Heating"; Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, USA (Best Available Copy)	
	203	GEORGE S. BRADEY, ET AL., Materials Handbook, 12th Edition; 1986; pp 28-29; McGraw-Hill Book Company; New York.	
	204	R.C. DYKHUIZEN ET AL.; Gas Dynamic Principles of Cold Spray; Journal of Thermal Spray Technology; Vol. 7(2); pp 205-212; June, 1998.	
	205	KAZAKOV, N.F. (ed.); Diffusion Bonding of Materials; 1981; pp 4-9, 248-257; Pergamon Press; U. S. A.	
	206	NICHOLS, M.G. & LEE, R. J.; Joining Dissimilar Materials, Metals and Materials, The Journal of the Institute of Metals, Vol. 5, No. 6, June 1989; UK.	
	207	CERJAK, H. (ed.); Mathematical Modelling of Weld Phenomena 5; Diffusion Bonding of Glass to Metal in an Electrostatic Field; M. Morsy et al.; pp 945-959; London IOM Communications, 2001.	
	208	OSTYN, K. & VINCKIER, A.; Joining of Different Materials Through Interfaces; Interfaces in Materials, Proceedings of the Colloquium; pp. 153-173; Brussels, 12/1988.	

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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		Attorney Docket Number	STRK-26,621
Sheet	3	of	3

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	209	ARATA ET AL. Pressure and Field Assisted Bonding of Glass to Aluminum; Transactions of JWRI is published by Welding Research Institute of Osaka University; Vol. 13; No. 1; 1984; pp 35-40.	
	210	SADPYSKY ET AL.; Precision Welding of Glass to Kovar Without Melting; Svarochnoe Proizvodstvo; February 1973; pp 22; (In Russian, English translation provided).	✓
	211	KAZAKOV ET AL.; Equipment for Diffusion Welding of Rectangular Glass Plates to Kovar; Svarochnoe Proizvodstvo; June 1977; p 50; (In Russian, English translation provided).	✓
	212	PCT; International Search Report of PCT/US03/07553 (related application); International Publication No. WO 03/083938 A1; 16 June 2003; 2 pg.	

Examiner Signature	Date Considered
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